



Demystifying Systems Life Cycle Management (LCM) – *The SOA LCM Factor*

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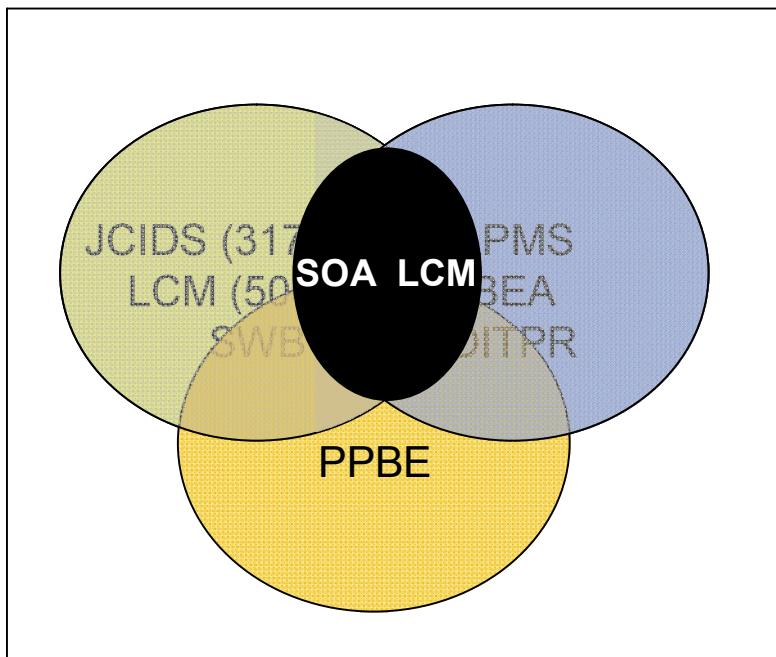
August 06, 2007



Agenda

- ☐ Problem Space
- ☐ SOA Define
- ☐ Web services examples
- ☐ Not Web services
- ☐ COIN Example
- ☐ SOA LCM Injection
- ☐ Takeaways

Problem Space



PLANNING, PREPARING, BUDGETING AND EXECUTION

- Acquisition Management System
- System Development Programs (FYDP)
- Distributed Enterprise Design Environment
- Distributed Enterprise Architecture (BEA)
- Testing Business Systems
- Business Process Models (BPM)
- Program Objective Rules
- DoD Information Registry (DITPR)
- Software Design Template
 - Interoperability testing
 - Certification/Change Management



SOA is all about Web Services

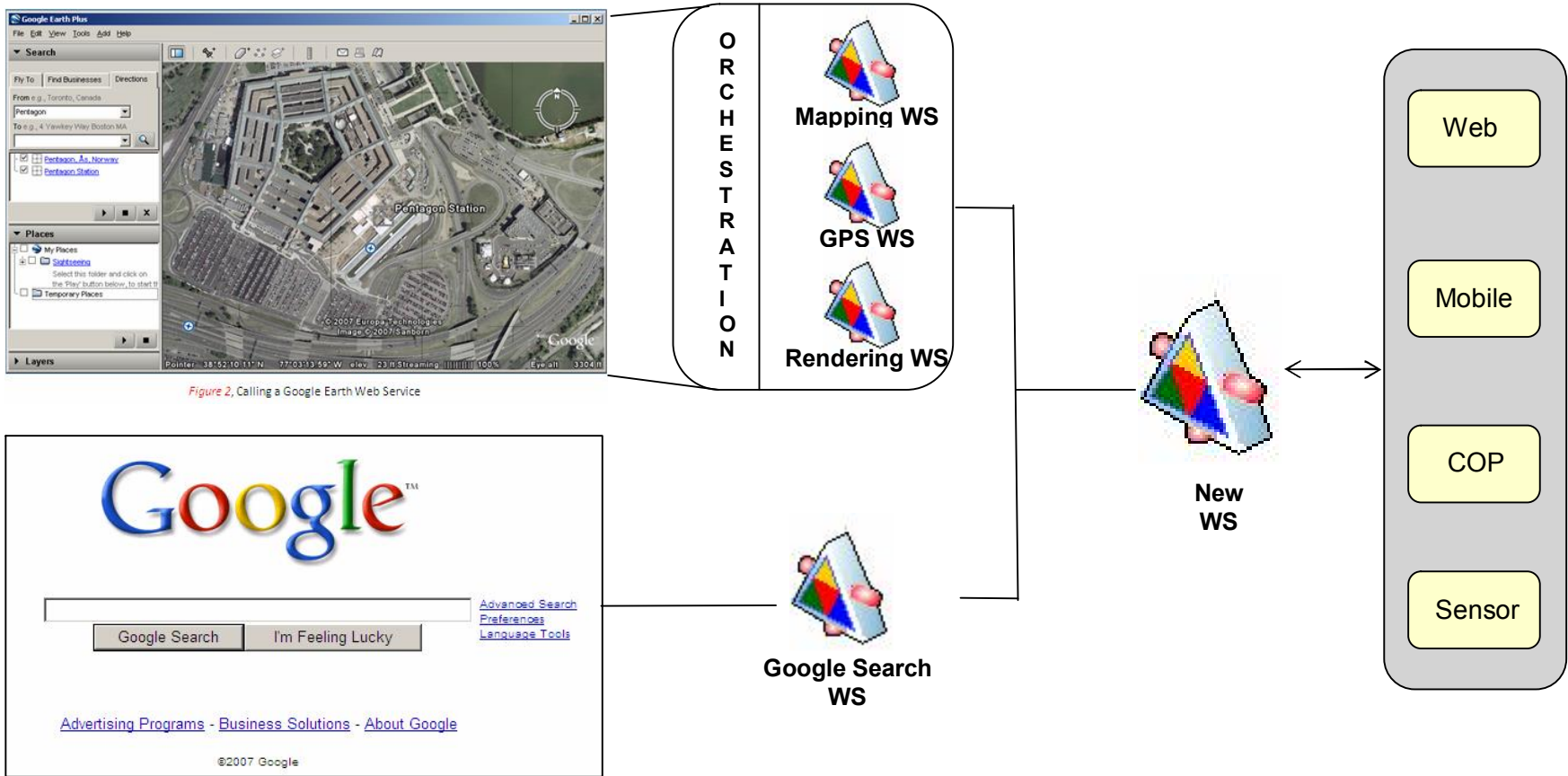
Web Services Defined:

“The term *Web services* describes a standardized way of integrating Web-based applications using the XML, SOAP, WSDL and UDDI open standards over an Internet protocol backbone. XML is used to tag the data, SOAP is used to transfer the data, WSDL is used for describing the services available and UDDI is used for listing what services are available.”

Source: webopedia.com

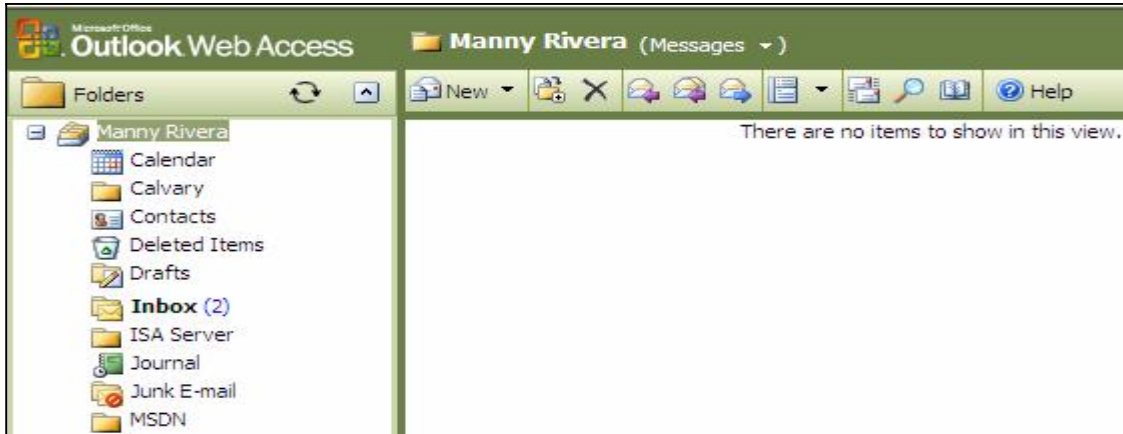
Web services Examples

Well known Web Services:



Not Web services

Services vs Web Services:



Web Outlook is a service

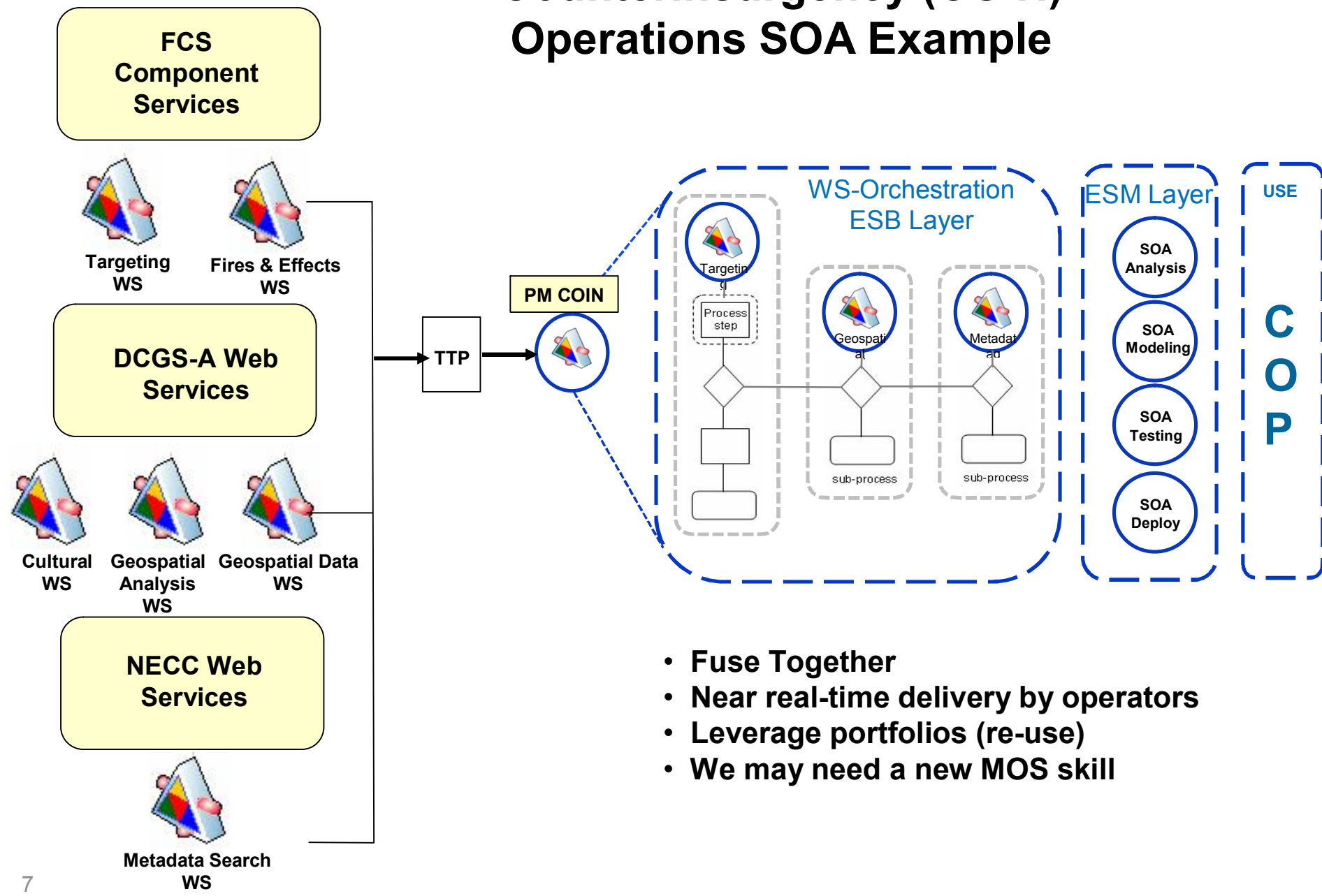
- XML data tagging not used
- SOAP is not used to transfer data
- WSDL is not used to define service
- UDDI is not used to discover the location



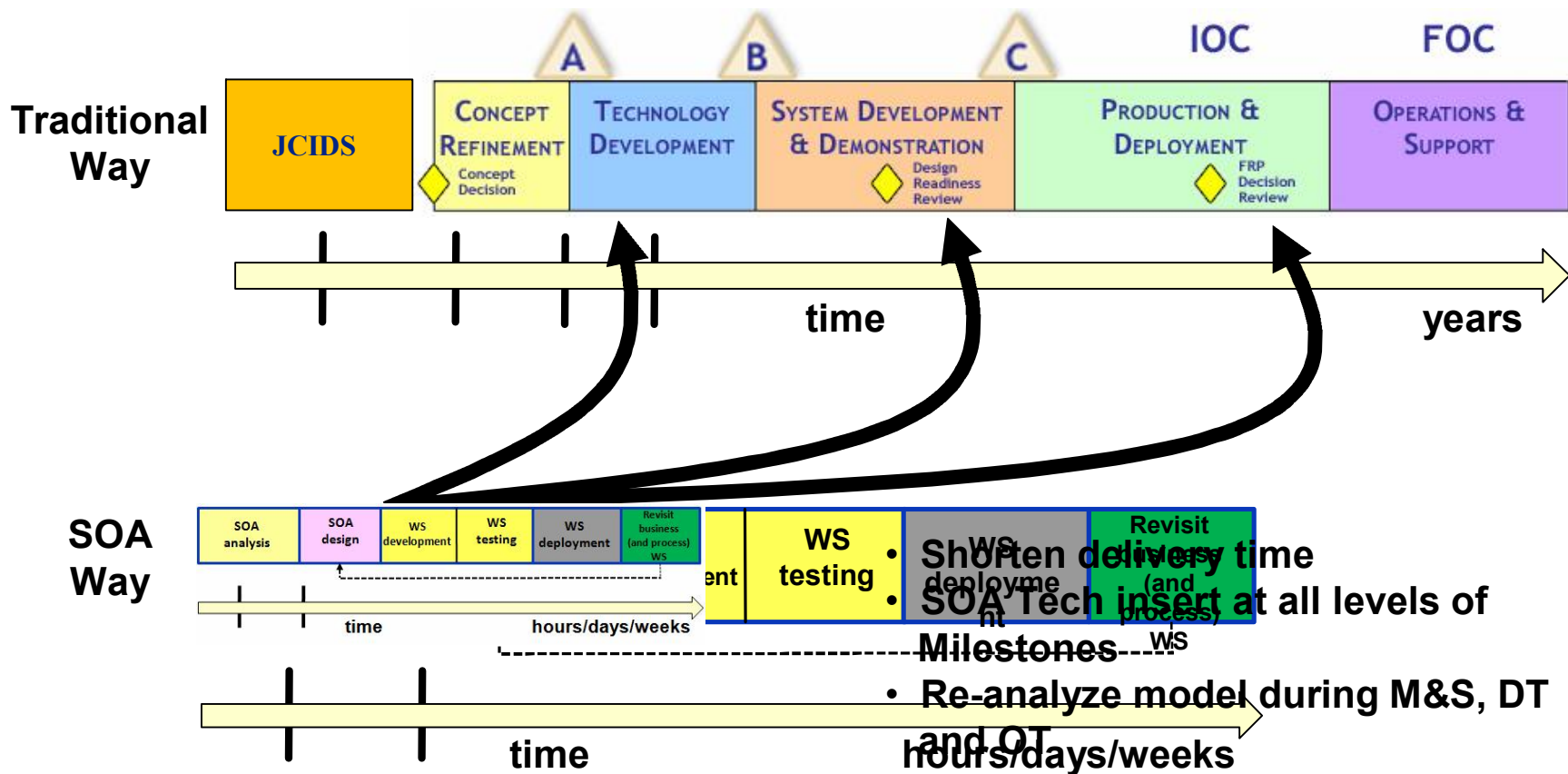
Collaboration is a service

- XML data tagging can be used
- SOAP is not used to transfer data
- WSDL is not used to define service
- UDDI is not used to discover the location
- Some of the individual components are sometimes exposed as web services

Counterinsurgency (COIN) Operations SOA Example



SOA LCM Injections





Takeaways

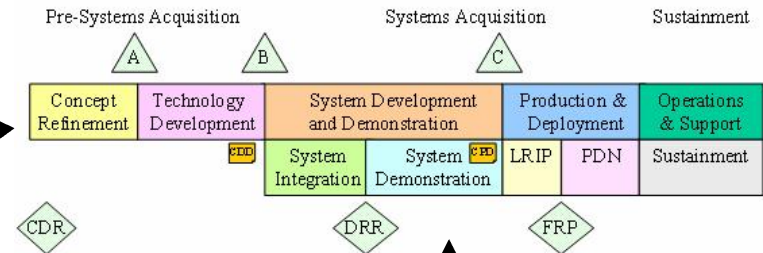
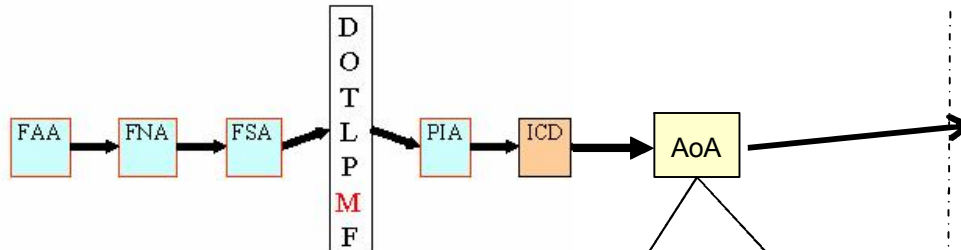
- ✓ SOA Can shorten System Life Cycle
- ✓ We must bring all players to the table
- ✓ SOA LCM can enhance our current governance process
- ✓ We must create automated process for current SOA portfolio within APMS and BEA



BACKUPS

SOA INPUTS

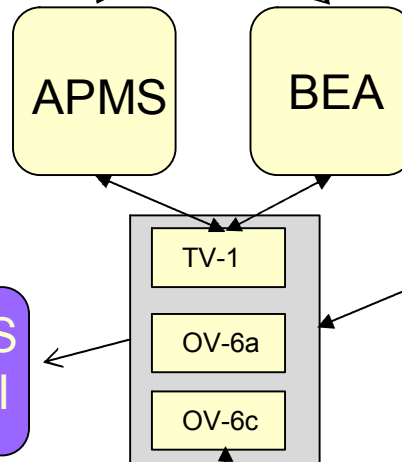
Leverage our current Web Services and Business Models



Automated discovery:

TV-1 – Standards (SOAP, WSDL, XML)
 OV-6a – rules (Workflows)
 OV-6c – Business Process Models
 Search NCES UDDI for services

NCES
UDDI



SWB

PM/Developers

Certify & Control models and interoperability of systems. SWB must be able to define the baseline for BPM and Workflows systems use within a block.

SOA LIFE CYCLE MANAGEMENT

SOA Life Cycle Management Process - Abridged

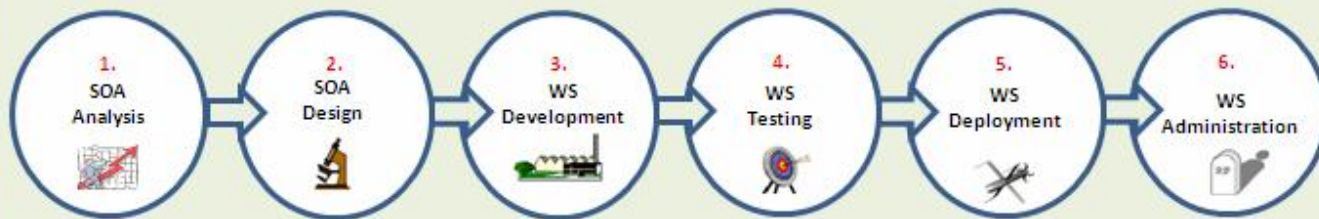
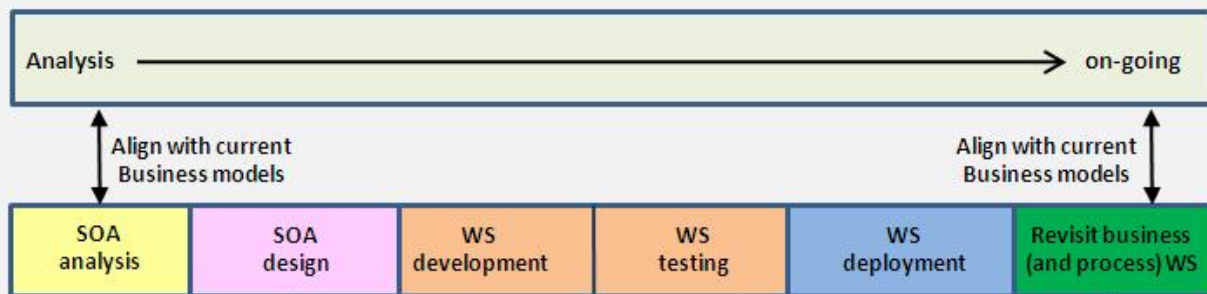
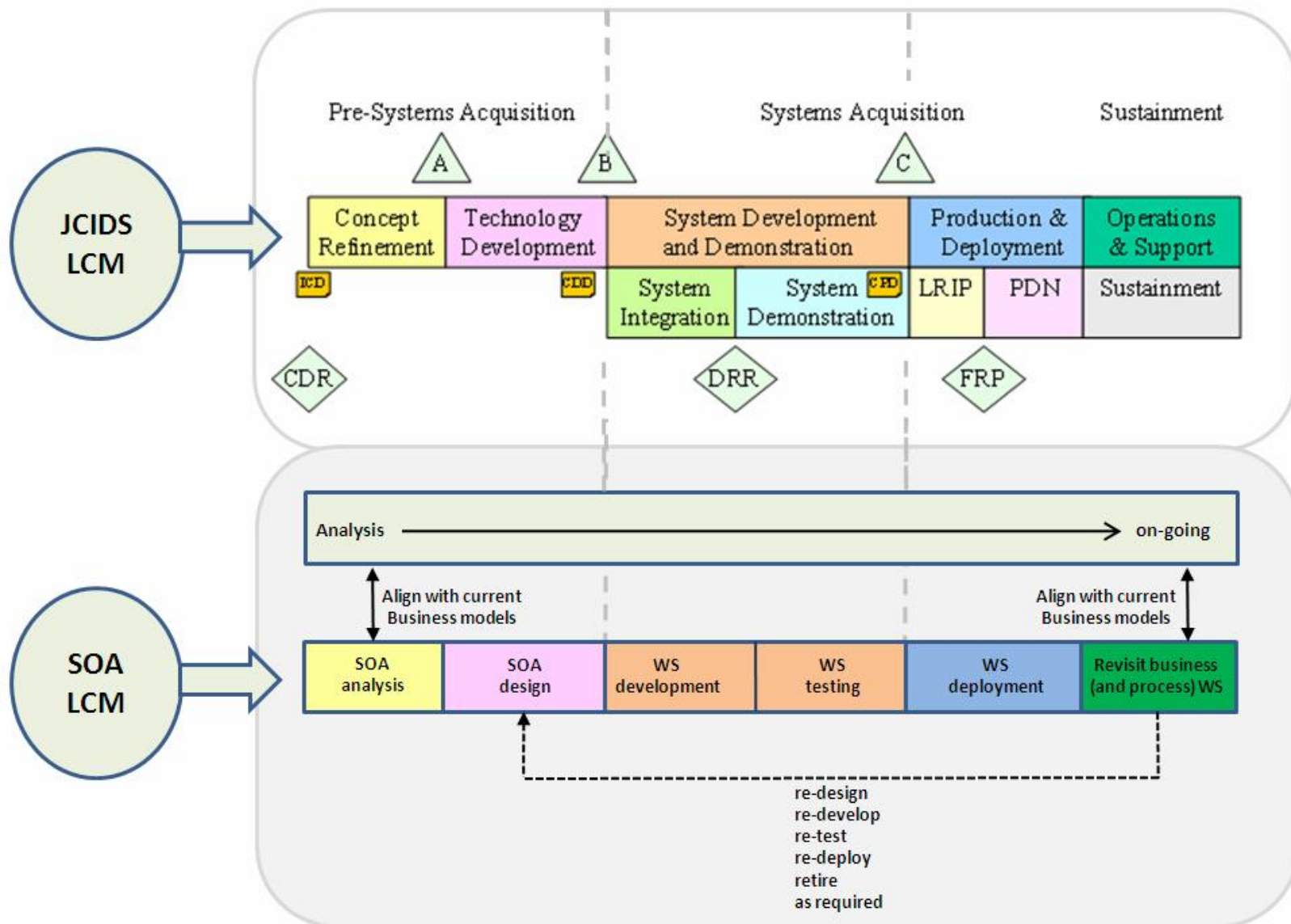


Figure 9, The six basic SOA life cycle activities



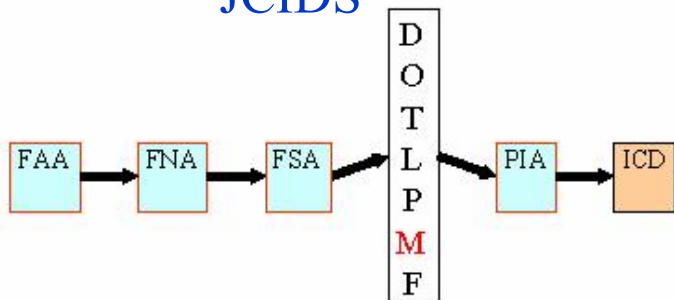
AGILE SOA delivery will influence how we acquire and build systems in the future

INTEGRATED SYSTEM LIFE CYCLES

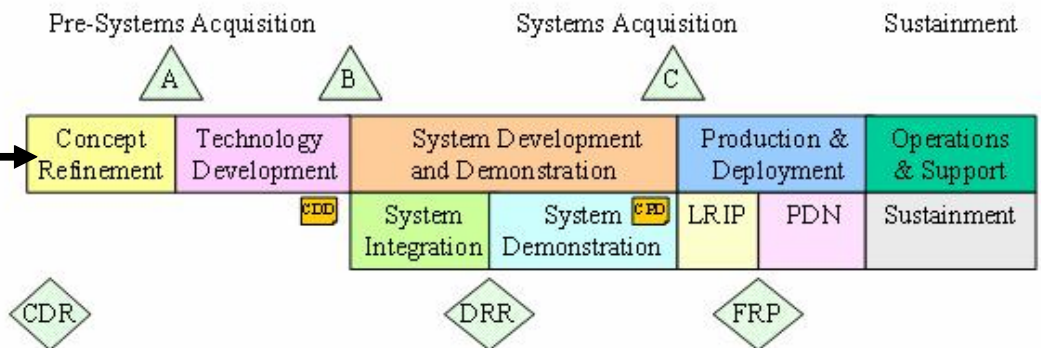


DOD SYSTEM LIFE CYCLE

JCIDS



THE LIFE CYCLE MODEL



MDR A - Approval to investigate alternatives
MDR B - Program approval
MDR C - Production approval
CDR - Concept Decision Review
DRR - Design Readiness Review
FRP - Full-Rate Production Decision Review

- Concept Refinement – Evaluate alternative solutions
- Technology Development – Reduce technical risk and select technologies for development
- System Integration – Assemble components into end item
- System Demonstration – Prove end item in field testing
- LRIP – Produce limited quantities
- PDN – Full-rate production

Process is precise, but takes a long time to deliver in a SOA World